Claim Amendments:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Canceled)

2. (Previously Presented) The method of claim 11, wherein the fluid medium comprises water.

3. (Previously Presented) The method of claim 11, wherein the mechanical waves comprise sound waves.

4. (Original) The method of claim 3, wherein the sound waves are ultrasound waves, having a frequency not less than about 20 kHz.

5. (Original) The method of claim 4, wherein the sound waves have a frequency not less than about 100 kHz.

6. (Original) The method of claim 4, wherein the sound waves have a frequency not less than about 200 kHz.

7. (Previously Presented) The method of claim 11, wherein the substrate is translated through the fluid medium in a reel-to-reel process.

8. (Original) The method of claim 7, wherein the substrate is translated continuously through the fluid medium while subjecting the substrate to the mechanical waves.

9. (Previously Presented) The method of claim 8, wherein the substrate is translated through the fluid medium at a rate of at least 2 inches/minute.

10. (Previously Presented) The method of claim 9, wherein the substrate is translated through the fluid medium at a rate of at least 10 inches/minute.

11. (Currently Amended) A method of forming a superconductive device, comprising:

polishing a metal alloy substrate tape having a dimension ratio not less than 10^2, the metal alloy substrate tape having first and second opposite major surfaces, at least the first opposite major surface being polycrystalline and randomly textured;

degreasing the first opposite major surface of the substrate tape;

cleaning the substrate including immersing the substrate tape in a fluid medium and subjecting the substrate tape to mechanical waves in the fluid medium;

electroplating nickel onto the substrate;

annealing the substrate tape after cleaning to relax the crystalline structure of the substrate tape, the first opposite major surface remaining polycrystalline and randomly textured;

depositing a biaxially textured buffer layer by ion beam assisted deposition to overlie the first opposite major surface of the substrate tape after annealing, the first opposite major surface being polycrystalline and randomly textured; and

depositing a superconductor layer to overlie the buffer layer.

12. (Original) The method of claim 11, wherein polishing includes reducing a surface roughness of at least one side of the substrate through a series of successive polishing operations.

13. (Original) The method of claim 11, wherein polishing is carried out by contacting the substrate with an abrasive slurry, and applying a force against the substrate to effect material removal.

14. (Previously Presented) The method of claim 11, further comprising a step of executing a high pressure rinse prior to cleaning.

15. (Cancelled)

16. (Previously Presented) The method of claim 11, wherein annealing is carried out at a temperature of at least 400°C.

17. (Previously Presented) The method of claim 11, wherein annealing is carried out in a non-oxidizing environment.

18. (Original) The method of claim 17, wherein the non-oxidizing environment is a reducing environment, containing a reducing gaseous component.

19. (Original) The method of claim 17, wherein the non-oxidizing environment comprises an non-reactive gas.

20. (Previously Presented) The method of claim 11, wherein the annealing is effective to reduce defects along a surface of the substrate.

21. (Previously Presented) The method of claim 11, wherein the annealing is effective to remove impurities along a surface of the substrate.

Claims 22-26 (Canceled).

27. (Previously Presented) The method of claim 11, wherein the superconductor layer has a Tc not less than about 77K.

28. (Original) The method of claim 27, wherein the superconductor layer comprises YBCO.

29. (Previously Presented) The method of claim 11, further comprising depositing a stabilizer layer overlying the superconductor layer.

30. (Previously Presented) The method of claim 11, wherein the superconductive device is a superconductive tape.

31. (Previously Presented) The method of claim 11, wherein the superconductive device is an electric power component incorporating a superconductive tape comprising said substrate and superconductor layer.

32. (Canceled)

33. (Previously Presented) The method of claim 11, wherein the superconductor layer overlies the first opposite major surface.

Claims 34-40 (Canceled)

41. (New) A method of forming a superconductive device, comprising:

polishing a metal alloy substrate tape having a dimension ratio not less than 10^2, the metal alloy substrate tape having first and second opposite major surfaces, at least the first opposite major surface being polycrystalline and randomly textured;

degreasing the first opposite major surface of the substrate tape;

cleaning the substrate including immersing the substrate tape in a fluid medium and subjecting the substrate tape to mechanical waves in the fluid medium;

annealing the substrate tape after cleaning to relax the crystalline structure of the substrate tape, the first opposite major surface remaining polycrystalline and randomly textured;

directing an oxygen free plasma to the first opposite major surface of the substrate after annealing to remove a native oxide layer from the first major surface;

depositing a biaxially textured buffer layer by ion beam assisted deposition to overlie the first opposite major surface of the substrate tape after directing the oxygen free plasma, the first opposite major surface being polycrystalline and randomly textured; and

depositing a superconductor layer to overlie the buffer layer.